

War II

# 2015 Cryptologic History Symposium

"A Century of Cryptology"
Preliminary Program
(subject to change)

♦ Thursday 22 October 2015 ♦

Kossiakoff Center, JHU Applied Physics Lab

Registration opens at 0700

#### **OPENING PLENARY 0800-0915**

Keynote speaker: Richard H. Ledgett, Jr.
Deputy Director NSA (Invited)

Parkway Chorale

Break 0915-0945

## SESSION 1 (Concurrent Sessions) 0945 - 1115

## 1A World War II - Cryptanalytic Issues I

How Effective Was Tunny Cryptanalysis at

Bletchley Park?

Jim Reeds

German Mathematicians and Cryptology during World

## **1B Pre-20th Century Cryptology**

Use of Techniques of Cryptology in Real Life Situations in 17th and 18th Century Central Europe Benedek Lang

Simple Code and Unknown Hazards: Alexander Fraser's Journey to the Illinois Country Daniel A. Papsdorf

Growth of the Telegraph During the Civil War

Timothy A. Carver

Confederate Cryptology: States' Rights & Laissez Faire Robert S. Stewart

## 1C Cipher and Crime

FBI Codebreakers: History and Highlights of the FBI's Cryptanalysis and Racketeering Records Unit

Daniel B. Olson

Unsolved Cryptograms from Criminals and Crime Victims Klaus Schmeh

The Zodiac Ciphers: What Do We Know and When Do We Stop Trying to Solve Them?

David Oranchak

**LUNCH 1115 – 1230** 

Speaker 1145 - 1215

"Technology ... the Key to NSA Success" John H. O'Hara

Sandy L. Zabell

## SESSION 2 (Concurrent Sessions) 1230 – 1400

## 2A World War II - Cryptanalytic Issues II

The Japanese Coral Cipher Machine Chris Christensen
Calculating Hall's Weights Jared Antrobus

## 2B Declassification of the Friedman Papers

The National Security Agency and the William Friedman
Collection David Sherman

Processing the Friedman Release

Sarah Parsons, Robert Simpson, Sheryl J. Shenberger

The Friedman Papers at the Marshall Library

Jeffrey S. Kozak

## 2C The Historical Value of Signals Intelligence

HUMINT versus SIGINT in the Cyber Age David Gioe
The Hidden Hand Gene Poteat
"Manna for Moscow" Benjamin B. Fischer

Break 1400 - 1430

## **SESSION 3 – Plenary 1430 – 1600**

## Looking Back 100 Years - The Friedman Legacy

Elizebeth Friedman and Law Enforcement

Barbara Osteika

National Security and Career Concerns: Legendary
Cryptanalyst Elizebeth Friedman's Qualms on the Eve of
World War II
G. Stuart Smith

The Friedman-Hagelin Connection and NSA Cryptologic "Back Doors" Stephen Budiansky

My Grandparents, William and Elizebeth Friedman
Chris Atchison

## **♦** Friday 23 October 2015 **♦**

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# SESSION 4 (Concurrent Sessions) 0800 – 0930 4A World War II - The Use of Signals Intelligence

The RADO Case and the Hunt for Clandestine Emitters in Switzerland during World War II Christian Rossé

Nimitz Bets the Ranch: The Commander's Role in Intelligence J. Paul Pope and Richard H. Ector

The Wolf at the Door: An Analysis of Army Prewar Plans, SIGINT, "Joint" Regional Intelligence, and the FCC in the Second World War Japanese-American Internment Decision Paul Thomsen

## 4B World War I – Early Application of SIGINT

Knowing the Enemy's Plans: The Battle of Tannenberg and German Radio Intercepts on 25 August 1914 Andrew H. Smoot

Birth of the Russian Radio-Intelligence on the Baltic Sea in World War I Ivo Juurvee

Deployment of SIGINT Assets to Support AEF Military
Operations Betsy Rohaly Smoot

Signals Intelligence, Sound Ranging, and Target
Acquisition
John Ferris

## **4C Cyber Issues**

The Emergence of Computer Security Discourse at RAND (1958-1970)

Tom Misa

The Case for (and against) Dual EC DRBG
Stephen Checkoway and Matthew Green

Crisis Stability, the Security Dilemma, and Cyberspace Operations Marty Busse

Break 0930 - 0945

# SESSION 5 (Concurrent Sessions) 0945 – 1115 5A Issues in Asian Cryptology

Disinformation in Historic China

Ralph D. Sawyer

The Sino-Japanese War of 1894-1895 Decrypted
Gregory J. Nedved

## 5B World War I - Women, Spies, and Mysteries

Advance to the "Fighting Lines": The Changing Role of Women Telephone Operators in France During World War I Jill Frahm

Spies in America: German Spies & MI-8 in World War I John Dooley

A 100-Year-Old Unsolved Cipher

Craig Bauer

## 5C World War II - From Bletchley to Burma

The Restoration of Bletchley Park – Current Status and Future Objectives Joel Greenberg

Oral Histories of Americans at Bletchley Park

David P. Cooley

The Neglected Theater: SIGINT in the China, Burma, India Theater of War David A. Hatch

LUNCH 1115 – 1230 Speaker 1145 – 1215 John C. "Chris" Inglis

## SESSION 6 (Concurrent Sessions) 1230 – 1400

#### 6A World War II - Machines

Restoring SIGABA Paul E. Orman

Repairing and Restoring Enigmas Jim Oram

## **6B Are They Solvable? Some Unsolved Ciphers**

Cracking Unsolved Historical Ciphers and Challenges

George Lasry

The World's Oldest Unsolved Cipher Craig Bauer

The New Clue about Kryptos Elonka Dunin

## 6C British SIGINT from Mazzini to Post-World War II

The Mazzini Affair and the (Temporary) Closure of British SIGINT Marty Busse

The Secret Admiral: Researches in the Life of Hugh Sinclair, Director GC&CS, 1923-1939

James A. Bruce

Designing a Postwar SIGINT Organisation for the UK Tony Comer

Break 1400 - 1430

### **SESSION 7 – Plenary 1430 – 1600**

## The Legacies of Gordon Welchman and Alan Turing

Gordon Welchman, Bletchley Park's Architect of Ultra Intelligence Joel Greenberg

Alan Turing Sir Dermot Turing

## ♦ Saturday 24 October 2015 ♦

National Cryptologic Museum **Self-guided tours 0900-1200** 

0930 - 1100 Guided tour

1000 – 1130 Workshop on sources for cryptologic history

Bring your research problems/questions

Meet in Library

Sign up at registration on Thursday or Friday.

**1000 – 1130** Museum History and Treasures

MAGIC room, no sign-up needed

